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(51) International Patent Classification 6 : G06F 17/60	A2	(11) International Publication Number: WO 95/12176
		(43) International Publication Date: 4 May 1995 (04.05.95)

(21) International Application Number: PCT/US94/12646

(22) International Filing Date: 31 October 1994 (31.10.94)

(30) Priority Data:
08/145,399   29 October 1993 (29.10.93)   US

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(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ).

Published
Without international search report and to be republished upon receipt of that report.

(54) Title: INTERACTIVE MULTIMEDIA COMMUNICATIONS SYSTEM WHICH ACCESSES INDUSTRY-SPECIFIC INFORMATION

(57) Abstract

An information processing system for acquiring and displaying information relating to a specific industry or interest, the example herein being real estate and related goods and services. The system comprises a server which has an input/output device for receiving and transmitting data, database files, and database storage. A media terminal for producing files, including digitized property descriptions, is provided. The media terminal has a digitizer for analog/digital signal converting, an i/o device for transmitting, and a data entry device. An end user terminal provides the ability to enter, transmit, receive and display data to and from the file server. An agent's terminal is equipped to enter and display data, as well as transmit information to and from the file server. The system is configured such that real estate information is received at the media terminal, edited, and, once approved, stored at the file server. The information is accessible from either the agent's or end user's terminals. The compilation of information in the databases includes demographic statistics which are usable by Advertisers and various industry related entities.

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INTERACTIVE MULTIMEDIA COMMUNICATIONS SYSTEM WHICH

ACCESSES INDUSTRY-SPECIFIC INFORMATION

BACKGROUND OF THE INVENTION

BRIEF DESCRIPTION OF THE INVENTION

The instant invention relates to a method of accessing industry specific information, such as real estate properties for sale, through multimedia personal computers. The disclosed invention includes an interactive multimedia communications system for the production, digitization, compression and decompression, transmission, and retrieval of real property data and related information. The access provides detailed information on a particular property, community, financing, demographics, and related information. The information can be accessed on demand by Real Estate Agents as well as by End Users wherever their multimedia device is located. The instant system presents a new advertising medium for industry-specific advertisers or even general advertisers as the case may be. The instant system is a response-driven, full service, real-time advertising medium capable of generating direct response vehicles (i.e., coupons, reply and order mechanisms, etc.) to viewers. For illustrative purposes, the real estate industry is used as an example herein, however, the disclosed system can be used for other applications, i.e., travel, employment opportunities, auctions, antique or rare articles for sale, automobiles, boats, aircraft, etc. Because each property profile and advertisement regardless of sponsor has its own identification code and each user of the disclosed system has their own access code, the instant invention provides detailed data on all aspects of viewership and response. When, where, and how often an advertisement and/or profile is viewed is instantly recorded by the disclosed system. The instant invention is a measurable advertising medium which measures advertising in terms of exposure, response, and level of interest. Viewership and response patterns can be retrieved by advertisers, agents, and subscribers via the disclosed system's demographic retrieval databases.

BRIEF DESCRIPTION OF THE PRIOR ART

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Each year large numbers of the population move, requiring property purchasing, leasing, selling and related services. In the residential market, real estate agents and homeowners selling their own properties spend considerable time matching seller to buyer and vice-versa. In the agent's case, buyers review property listings from a Multiple Listing Service at the agent's office, making judgments based on photographs and limited information. The details are generally on a single sheet at best, and include the number of rooms, occasionally size of rooms, number of bathrooms, land size, and any out-buildings such as barns. The properties chosen for review must then be physically shown, so Real Estate Agents then drive potential buyers around showing properties, which wastes both time and money. Potential purchasers often need to take time off from work and spend many hours riding around looking at properties.

The prior art system is, at best, time consuming and inefficient. Everyone involved in the house hunt must be prepared to devote a substantial amount of time to viewing properties.

On the other side of the transaction, sellers often have potential buyers looking at their homes who are not interested in making a purchase or worse yet, not financially qualified. Frequently a property is inaccessible when a potential purchaser wants to view it or a "no-show" occurs after the agent and/or seller went to considerable time and effort to present the property. Likewise, the agent and seller have a significant investment of time, effort and money at stake if the buyer fails to qualify for financing or the closing doesn't occur as scheduled.

The commercial real estate market is almost identical to the residential market in regard to how properties are reviewed and chosen. One primary difference is, however, the due diligence performed by both users and investors of commercial real estate. Typically, users and real estate investors will seek the financial data on a property prior to even physically seeing it. Extensive information regarding comparable rents, vacancy rates, and similar properties is often the norm. Obtaining this information is often difficult and once received, it is limited in scope. In addition, landlords typically dislike disturbing existing tenants with the showing of their property to a potential purchaser or new tenant.

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At present, real estate agents from around the United States employ various forms of a property listing system often referred to as the Multiple Listing Service (MLS). These systems are usually not accessible by agents outside the local system and provide little information on properties elsewhere or any network for referrals. In addition, any type of market data generated by the MLS is local in nature and cannot be easily translated into state, regional, or national trends. In most instances the current listing system provides small opportunity for an agent to handle the sale of a client's property and the purchase of a new property for the same client unless the move is local.

The majority of real estate advertising today is through local newspapers and trade publications. These advertisements are limited to space and production deadlines and readership is certainly hoped for, but in nearly every case unaccounted for. If changes in price, terms, or availability occur, the new information is restricted to production deadlines and such. In short, the traditional advertising mediums used for real estate advertising are usually non-measurable, limited in choice, fairly expensive and often non-exclusive in nature.

Another major marketing tool employed by both agents and sellers alike is "open houses." Due to access, convenience, and work schedules, "open houses" have been confined to weekends and predominately Sunday afternoons. The "open house" continues to be a valuable marketing tool but is limited to time constraints.

Often real estate agents are restricted for ethical and/or legal reasons from informing clients about local schools, churches and civic organizations. As a result, newcomers to an area have to investigate these facilities themselves and often under the pressure of time and convenience.

Illiquidity in the real estate marketplace often creates transactions wherein the seller will finance all or a portion of the purchase price. While presently, there are numerous entities that purchase these notes, there is no common medium for note-holders to advertise these security instruments for sale or exchange. Likewise, no medium exists which compiles data on these instruments.

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Traditionally, the real estate industry has faced illiquidity, high capitalization (and the costs thereof), and cyclical trends. The "boom" decade of the 80's created an abundance of real estate and agents who market it. The current recession has produced a large correction in real estate prices which brings an already over supply of agents chasing fewer closings and smaller commissions. Having already noted the cyclical nature of the real estate industry, it still is important to realize that most agents even in good times or bad don't get both sides of a transaction. In other words, the sale of their client's current home and the purchase of their new property. Bridging this inefficiency as well as the others covered herein would yield greater productivity in the real estate marketplace and better use of personnel.

Therefore, the desire of all parties is a cost effective, efficient, and convenient means of retrieving detailed property information. With the system of the current application, consumers can view real property advertisements including digitized pictorial graphics and audio information, mortgage qualification programs and guidelines, mortgage rates, and different community profiles at their convenience and in the comfort of their own homes through use of the instant system. Once the End Users have narrowed down their choices, they meet with a Real Estate Agent at his or her office and access the Real Estate Agent's exclusive system. The Real Estate Agent's system details more about the property such as the Seller's name, property address, and listing agent information. In essence, anyone involved in a real estate transaction can readily retrieve and view all types of properties and related goods and services without the inefficiencies of the prior art system.

BRIEF DESCRIPTION OF THE DRAWINGS

The advantages of the instant disclosure will become more apparent when read with the specifications and the drawings, wherein:

FIGURE 1 is a schematic of the major components according to the present invention;

FIGURE 2 is a schematic showing the flow of raw data in production to digitization, editing, transmission, and storage according to the present invention;

FIGURE 3 is a schematic showing the flow of data being compressed and decompressed, transmitted, and proofed between the media company and the Real Estate Agent according to the instant invention;

FIGURE 4 is a schematic which represents the flow of data from storage at the Server's central location to the Real Estate Agent according to the present invention;

FIGURE 5 is a schematic which represents the flow of data from storage at the Server's central location to the End User for viewing according to the instant invention;

FIGURE 6 is a flow chart composite of figures two through five according to the present invention, (demographic and advertising retrieval devices would be similar to 200 or 300)

FIGURE 7 is an example of one possible multimedia graphical advertisement screen according to the present invention,

FIGURE 8 is an example of one possible graphical advertisement screen used by Real Estate Agents according to the instant invention; and

FIGURE 9 is an example of one possible graphical advertisement screen used by Demographic Retrieval Users according to the instant invention.

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SUMMARY OF THE INVENTION

The instant invention is directed at an information processing system for acquiring and displaying real estate, demographics and industry related information. The system includes a Server having an i/o (input/output device) through which data is received and transmitted, and database storage for storing digital real estate information. Preferably the database storage includes the capability of storing scanned graphic images, video, and sound, as well as standard data.

The system further includes media terminals for production of files, including digitized property descriptions. The media terminal has digitizing capabilities to digitize analog input and i/o for receiving and transmitting the digitized information.

End users enter and receive information, including property descriptions, at the End User terminal. The end user terminal has means for inputting and displaying data, such as a cable television converter, and a microcomputer, and either an internal or external i/o for receiving and transmitting data.

The Real Estate Agent terminals are used for entering and receiving information and are equipped with a means for inputting and displaying data and i/o for receiving and transmitting data.

The i/o of the system components are configured to communicate between the Media, End User, Real Estate Agent and Demographic Information Subscriber and Server. Real estate information, consisting of property descriptions, demographic, financial, and advertising information, is received by the Server from all input sources via the i/o of the media terminal. The received information is then stored in the Server's database. Viewer selected portions of information are transmitted to the end user terminal, where they are displayed for viewing.

The Media, End User, Real Estate Agent and Demographic Subscriber terminals have compression/decompression capabilities for file storage and/or transmission. Also, optionally and preferably, the Server stores information regarding property profiles, real estate professionals, community profiles, real es tate financing, local businesses and services, and demographic

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retrievals, all of which can be received and displayed by the viewer. The instant system is configured to prevent access to certain real estate information, but configured to make that same information available to other users.

The instant invention is a method of acquiring and displaying real estate information, the system utilizes an information processing system containing a Server with i/o for receiving and providing data and database storage. Analog property descriptions of real estate properties are digitized and entered along with additional information, and edited at terminals. The proofed information is stored in the database in a manner in which the data can be selectively accessed. The End User enters data at their terminal specific to their real estate needs or services. This data is then sent to the Server, where the property profiles are selected and sent to the End User. Real Estate Agents can access the Server's databases through entry at their terminals and retrieve information. The system has the ability to access and transmit selected files, depending upon the requests of the user. In all cases, viewer selections are captured and stored by the Server.

DETAILED DESCRIPTION OF THE INVENTION

The instant invention discloses a network system which allows the users to interactively access and retrieve on demand extensive information on databases throughout the world regardless of time zone differences. The application of the instant disclosure described herein applies to the real estate and related industry, however the disclosed system can be used for other applications. For use within this disclosure, the following terminology is used for consistency and should in no way limit the scope of the invention.

End User - The party viewing the database files. Typically an End User of real estate looking to lease and/or purchase real property. The End User generally has access to only limited files and can optionally have input capability to alter the files they are viewing. The End User can include viewers seeking ideas for home building, decorating or remodeling. In addition, relocation companies or departments in corporations, architects, etc., are also included.

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Real Estate Companies and Agents - The sales agent or facilitator of a real estate transaction and the primary user of the instant system. The Real Estate Agent has access to the instant system regardless of where the system is accessed.

Media - The primary party responsible for production of property files and possibly all other advertising displayed on the system. The Media has access to all files on the Server and, alternatively, may be part of the Server's system. The Media can include multimedia communications, conglomerates, or local media entities.

Server - The computer system which stores all files. Input facilities for raw data may be located at the Server's location.

Multimedia device- A device and/or system which includes, but is not limited to, video and audio-graphic conferencing and multimedia messaging with electronic and voice mail system so specifications and other text-based material and voice communications can occur rapidly and without time zone interference. This unit is capable of storing, transmitting, receiving, compressing, decompressing and error correcting, digital information for displaying text, graphics, audio and video.

Advertiser - An entity promoting goods and/or services related to a specific industry. The advertising can be directed to any of the users in the instant system and direct response vehicles (i.e., coupons, reply and order mechanisms, etc.) are made available to viewers.

Demographic Information Subscriber - The recipient of demographic information which is generated by the instant system. Throughout the instant invention certain portions of demographic information can remain proprietary, but the demographic flow of the populace is available to Subscribers and industry-related advertisers.

It should be noted that a company or individual can fall into two or more of the foregoing categories. A moving company, for example, can be an Industry Related Advertiser and also a Subscriber retrieving demographic information for marketing purposes. In another example, an architect could be an advertiser of their services and, at the same time, be an End User accessing the disclosed system to monitor design trends, new housing developments, and competitive practices.

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Figure 1 is an overview of the major system components which would be required to complete the disclosed system. The media's multimedia device 100 would preferably consist of a digitizer 108, compress/decompress unit 106, modem 104, and multimedia PC 102. The real estate agent's multimedia device 200 would preferably comprise the multimedia PC 202, the modem 206 and the compress/decompress unit 204. The End User's, or Subscriber's, multimedia device 300 preferably consists of a multimedia unit 302 and a viewing device 304. The viewing device 304 can be the End User's television, a monitor, or other apparatus which allows for multimedia viewing. The multimedia unit 302 can be a computer system or a cable television converter with a microprocessor or other technology which provides for compression or decompression, error correcting, transmission, and storage. Alternatively, the multimedia unit 302 can be made part of the End User's viewing device 304. The Server's Processor, or unit 400, preferably comprises a modem 410, a Server's computer 412 and databases 420, 422, 424, 426, 428, 430, 432, 434, 436, 438, 440, 442, 444, 446, 448, 450, 452, 454, 456, 458, 460, and 462. The Server's computer 412 alternatively can be a workstation, minicomputer or microcomputer or other device. Although reference herein is made to information transfer via modem, it should be noted that cable, satellite, fiber optics, or other means for transferring information can also be utilized. The method of transferring the information is based on the current availability within the communities.

In the drawings herein the Server's computer 412 is at a separate location from the media's multimedia device 100, and all communication is conducted through the use of modems 104, 206, and 410. Alternatively, the Server's computer 412 can be included in the same location as the media's multimedia device 100 with a hardwire link up between the two. If the Server's Processor 400 is not hardwired to the media's multimedia device 100, means for directly entering information into the Server's computer 412 other than through media's multimedia device 100 may be desired. This can be through an additional PC wired to the Server's computer 412, scanner, personal digital assistant, or any other method known in the art.

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The For Sale By Owner (FSBO) Property Profiles Database 420 could include any type of
real property offerings marketed by owners. The Auction Property Profiles Database 422 could
include any type of real property offerings marketed via auctions. The Agent Property Profiles
Database 424 could include any type of real property offerings marketed by real estate agents.
The Agent Referral Database 426 could include any real estate agents and their companies who
market property via the disclosed system. The Transaction Processing Database 428 generates and
confirms appointments and significant dates for all parties involved in a real estate transaction.
This same database contains a general accounting file for Real Estate Companies which can be
exported to their primary accounting program. The Agent Leads Database 430 is a compilation of
inquiries generated when an End User or other interested party views a particular property
profile the Agent has advertised/listed on the disclosed system. The Agent Market Data Database
432 is a compilation of files such as inventory reports, sales-to-date, expired listings and contracts
pending. The Government and Civic Organizations Database 434 is a compilation of government
and civic organizations on a local, state, regional, and national basis that the viewer can access to
obtain information on particular issues such as zoning laws or involvement in a civic organization.
The Community Profiles Database 436 contains video vignettes on communities where properties
are available for purchase, lease, or exchange. The Events and Attractions Database 438 could
have files such as Arts & Entertainment, Annual Events, Sports, and Special Attractions. The
Educational Facilities Database 440 could consist of public, private, and trade schools, as well as
colleges and libraries. The Real Estate Related Services Database 442 could comprise the following
files: real estate companies, real estate agents, banks, mortgage companies, attorneys, insurance
companies, moving companies, home inspectors, builders, property management, appraisers, ar-
chitects, title companies, and any other type of real estate related service. The Home Services
Database 444 is a compilation of files such as decorators, furniture and antique dealers, appliance
dealers, building supply centers, remodeling services, home security services, and any other type of
home service business or entity. The Restaurants and Lodging Database 446 could consist of hotel
and motel files or bed and breakfast files as well as restaurant files. The Mortgage Programs

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Database 448 is a compilation of all available mortgage programs such as conventional, fixed, or

adjustable rate mortgage programs. The Personal Mortgage Analysis Database 450 is a compilation

of information derived from viewer input in regard to financing the purchase of any of the

properties viewed. The Mortgage Rates Database 452 is a compilation of various mortgage rates

offered by lenders on a local, state, regional, or national basis. The Real Estate Notes Database

454 is a compilation of real estate backed notes and securities offered for sale, servicing, or ex-

change on a local, state, regional, or national basis. The Property Inquiry Database 456 consists of

all qualitative inquiries generated by viewers seeking more information on specific property

profiles viewed on the disclosed system. The Property Retrieval Database 458 is generated by

viewership of any property profiles wherein the viewer may or may not be interested in pursuing

the transaction but has viewed the property. The Advertising Inquiries Database 460 comprises

all qualitative inquiries generated by viewers seeking more information on specific goods or serv-

ices advertised on the disclosed invention. The Advertiser Retrieval Database 462 is generated by

viewership of any advertising message wherein the viewer may or may not be interested in obtain-

ing more information about the advertiser's goods and/or services. All files are stored on their

respective databases, providing easy access and manipulation. The databases are continually up-

dated to ensure accurate, up-to-date information at all times. The foregoing files and databases

are used as examples only, and should not in any way limit the scope of the instant disclosure.

Figure 2 illustrates the information flow to and from the Media's multimedia device 100 to

the Server's Processor 400. The raw data is either gathered from outside sources, generally in the

form of analog information 110, or entered directly at the Media's multimedia PC 102. Any

analog information 110, albeit audio, video, photos, text, or graphics, must be digitized by Media's

digitizer 108 to be read by the PCs used herein. The digitized information is sent directly to the

Media's multimedia PC 102. Information from Real Estate Agents and other sources is received

via the Media's modem 104, or by any other means, for entry into the Media's multimedia device

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100. Data produced by the Media's personnel is directly entered onto the multimedia PC 102. Once entered, the information is edited at the media's multimedia PC 102, as illustrated in Figure 3.

In Figure 3, the edited information is placed in a file which corresponds to its existing database and compressed at the Media's compress/decompress unit 106. For example, the agent property profile is sent via Media's modem 104 to the Real Estate Agent's modem 206. The new file is received via the Real Estate Agent's modem 206 where it is sent to the Real Estate Agent's compress/decompress unit 204. After decompression, the file is sent to the Agent's multimedia PC 202 for review and proofing. The Real Estate Agent enters either approval or proofing instructions at this point.

After proofing, the file is sent back to the Media's multimedia device 100 with instructions for changes. When final approval has been granted by the Agent, the file is sent, as shown in Figure 2, via the Media's modem 104 to the Server's modem 410. Each file sent to the Server's computer 412 is designated a location, ensuring it will be stored with other similar files on the database in the Server's computer 412.

Figure 4 depicts the information flow from the Server's Processor 400 directly to the Real Estate Agent's multimedia device 200. The request for specific files is compressed at the Real Estate Agent's compress/decompress unit 204 and sent, via Agent's modem 206, to the Server's modem 410 where it is transmitted to the Server's computer 412. The requested files are then transmitted via modems 410 and 206, decompressed 204, and accessible on the Agent's PC 202. The Agent Referral Database 426 contains information on all agents and their companies located at the Server's computer 412 for the purposes of communicating any changes at the central location. In the event an Agent procures a transaction on a property listed by another Agent, the information for referral compensation would be accessible in this database. The Agent Referral Database 426 also creates an up-to-date directory of Agents and their respective Brokers/companies.

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The disclosed system allows Agents access to privileged information not available to the general public, such as the Seller's name, phone number, address, listing expiration date, and any notations entered into the file by the listing agent. The Agents would also have access to For Sale By Owner (FSBO) and Auction Profiles.

The Transaction Processing Database 428 generates and confirms appointments and significant dates for all parties involved in a real estate transaction. Specific information such as contracts pending and closing dates are communicated to the Agent Market Data Database 432 for compilation and inventory reports. The Transaction Processing Database 428 can also be used in conjunction, for example, with the Real Estate Related Services Database 442 to schedule appointments with attorneys, builders, home inspectors, bankers, or any other real estate related service needed to facilitate the real estate transaction.

The Real Estate Agent can retrieve leads generated by their own specific Agent Property Profile advertisements via the Agent Leads Database 430. The Agents can also retrieve quantitative data on general viewership of any type of real property offerings on the disclosed system via Property Retrieval Database 458 (see Figure 1). The use of the two aforementioned Databases in conjunction with the Agent Market Data Database 432 or any other combination of databases will provide extensive market research for the Agent.

Figure 5 illustrates how the End Users access the instant system in their own homes, or offices, with the use of the End User's multimedia device 300. The End User chooses a desired community and enters certain parameters, such as type of property and price range. Utilizing the entry device on, or part of the End User's multimedia unit 302, one or all of the databases available to the End User can be accessed in any combination. The End User's multimedia unit 302 can accommodate various inputs such as remote control or preferably voice recognition. However, a keyboard, mouse or other form of entry based on the End User's choice can be utilized. The End User's request is sent to Server's modem 410, then to the Server's computer 412. The requested information is then transmitted, via modem 410, to be viewed on demand. The End User's multimedia device 300 is provided with software coding or hardware which prevents the End User

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from entering restricted databases. Software coding can be the access number submitted in response to a computer prompt or other methods, such as computer recognition and capture of originating phone numbers. Hardware limitations can be similar to the cable television converter box in that only certain switches are set to activate the corresponding databases.

The preferred systems according to the instant disclosure are illustrated in Figure 6. External information, such as mortgage rates, graphics and/or other enhancements, any audio script recordings, still frames and/or videos, and mortgage qualifications, would be digitized by the Media's multimedia device 100. The information is edited through use of the Media's keyboard, compressed at Media's compress/decompress unit, and sent to the Media's modem for transmission. The information is then sent to the Real Estate Agent's device 200, decompressed at Real Estate Agent's compress/decompress unit, and sent to the Real Estate Agent's multimedia PC. The Real Estate Agent reviews and edits the information through the Real Estate Agent's keyboard and returns the information through the compress/decompress unit, and transmits via the Real Estate Agent's modem back to the Media's device. The approved information is sent from the Media's device to the Server's processor 400. From there, files are sent to the Server's computer where they are stored in their appropriate databases. Real Estate Agents access information stored in the Server's processor 400 by entering an access number. When the Real Estate Agent's system is accessed, the Real Estate Agent enters his/her password, thereby tying the Real Estate Agent's device 200 into the Server's processor 400 and allowing access to the Server's computer and stored files. Real Estate Agents subscribing to the instant system can have access to all files or be excluded from certain files. Agent access to the End User database can be restricted to those particular End User files generated by the listing agent.

End Users can access the files by entering a designated access number or by other means currently available. When the instant system is accessed, the End Users enter their individual access code. The End User's multimedia device 300 accesses the Server's processor 400 and subsequently the Server's computer and stored files.

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Figure 7 is an example of how an End User may view properties listed on the disclosed system. This screen 700, shows the End User receiving audio and video information on a property listed with a Real Estate Agent. In all cases, the property profile identification number is prominently displayed as is the contact person, regardless of how the property is being marketed (i.e., FSBO or Auction). The End User can directly communicate with the responsible party's office, home, mobile, or voice-mail telephone system through the Call Feature. The Fax Information Feature and Video Conference Feature can also be used as direct communication devices. In fact, the Video Conference Feature has real-time, "open house" capabilities. This feature would allow an End User to participate in an "open house" with an agent anywhere, anytime, without leaving home. Agents, or owners, showing the home plug a video camera into the audio/video input jack located on their multimedia device for communication. The End User communicates directly with the Agent through the audio portion of the Agent's multimedia device, requesting specific areas of the home to be shown by the Agent for viewing by the End user.

The Main Menu Feature allows the End User to return to the main menu of the disclosed system. Under the View Feature, the End User could fast forward, reverse, pause, zoom in/out, freeze frame, or resume play of the property or any other type of profile being viewed. Future advances in virtual reality would also be available under the View Feature. With the Options Feature, End Users could search and/or save property profiles, or delete property profiles previously viewed. The Transaction Processing Database 428 which provides calendar scheduling could also be accessed under the Options Feature.

The disclosed system would enable End Users to shop for properties of all types as well as ideas of all kinds. As an example, an End User could view numerous property profiles to gather kitchen remodeling ideas. Under the View Feature on screen 700, the End User could manipulate the kitchens to their liking, save these alterations under the Options Feature and use the Local Businesses Feature to access the Real Estate Services Related Database 442 and/or the Home Services Database 444. These two databases would allow the End User to do comparative shopping for building supplies, architects, decorators, remodeling contractors, appliance dealers, or any

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other type of goods or service providers needed to complete the project. Once estimates, plans, and

scheduling (via the Options Feature accessing the Transaction Processing Database) were final-

ized, the End User would obtain detailed information on financing the new kitchen via the

Mortgage Qualification Feature. The Mortgage Qualification Feature on screen 700 accesses the

Mortgage Programs Database 448, Personal Mortgage Analysis Database 450, and the Mortgage

Rates Database 452. Using these databases to compare loan terms and conditions, the End User

could communicate directly with the lending institution of their choice. Retrieving the property

profile with the desired kitchen or the altered version as the case may be, the End User can

provide a complete project loan request to the lender through their multimedia device and the dis-

closed system.

When accessing the Community Information Feature on screen 700, a video vignette of the

community chosen is aired. In addition, the Community Information Feature provides entry into

Community Information Databases like Events and Attractions 438 which contains details on arts

and entertainment, annual events, sports, and special events. Two other databases, Government

and Civic Organizations 434 and the Educational Facilities Database 440, provide the End Users

with information on schools, civic organizations, and churches which often Agents are not per-

mitted by ethics or law to discuss.

Figure 8 is an example of how a Real Estate Agent may view and retrieve information in

the disclosed system. Features specific to the Agents screen 800, include an Edit Feature which al-

lows Agents to proof the data produced by the Media and an Electronic Mail (E-Mail) Feature

which transfers privileged and proprietary information to other Agents who are users of the in-

stant invention. The sample screen in Figure 8 also displays four primary databases the Agent

would utilize frequently. They are the Referral Network Database, Transaction Processing

Database, Agent Leads Database (Leads), and Market Data Database.

As one example, the instant invention gives Agents extensive information which can be

used when obtaining property listings from owners. To get new listings, Agents could provide the

owners with information regarding the length of time it currently takes to market their type of

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property, obtain a bona fide contract, and close on a property similar to the owners'. This information is derived from contracts pending, contracts closing, and sales-to-date data available in the Transaction Processing Database and the inventory reports available from the Market Data Database which compiles quantitative property profile data from the FSBO, Auction, and Agent Listing Property Profiles Databases. The property profile databases (FSBO, Auction, and Agent Listings) collectively provide the Agent and Owner with how many similar type properties are currently on the market and marketed via the disclosed system.

By accessing the Agent Leads Database (Leads Feature, screen 800), the level of market interest in similar properties could also be obtained. This information would be available for last week, prior month, previous quarter, or even last year. Because the disclosed invention is not limited to locality or geographic boundaries, the instant invention enables the Agent to market the property wherever the disclosed system is available. Utilizing the Referral Network Database, the Agent can provide the owner with other Agents on the disclosed system who can assist them with their real estate needs elsewhere.

Figure 9 is a sample display screen 900 of Demographic Retrievals. Because each property profile and advertisement regardless of sponsor has its own identification code and each user of the disclosed system has their own access code, the instant invention provides detailed data on all aspects of viewership and response. When, where, and how often an advertisement and/or profile is viewed is instantly recorded by the disclosed system. The instant invention is a measurable advertising medium which measures advertising in terms of exposure, response, and level of interest. Viewership and response patterns can be retrieved by advertisers, agents, and subscribers via the disclosed system's demographic retrieval databases: Property Inquiry, Property Retrieval, Advertiser Inquiry, and Advertiser Retrieval. As the screen 900 example illustrates, viewership and exposures as well as inquiries and/or response can be retrieved on a National, Regional, State, or Local basis. Custom retrievals as a result of testing various advertising appeals/offers is also available. The disclosed system could provide levels of interest and psychographic profiles by questioning viewers at various points.

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The instant system supplies advertisers, agents, and subscribers with a daily picture of the local, state, regional, and national real estate market. Property inquiries from one geographic location to another are recorded so moving patterns can be traced. Demographic data compiled, merged, and sorted from the present invention can be used for a variety of purposes, but market trends and research as well as targeting advertising messages would be the primary use. As an example, a bank which advertises its mortgage programs and rates in the Mortgage Programs Database and Mortgage Rates Database could use the instant invention's demographic retrievals to determine if there was an increasing demand for housing in their area which could bring new deposit account relationships as well as the opportunity to book new mortgages. If housing demands were increasing as revealed by information retrieved on the disclosed system, the bank could rationalize the approval of a new development loan to a developer and subsequent credit line extensions to area builders, general contractors, excavation companies, paving contractors, and any other type of related business or service provider needed to fulfill the forecasted demand. To generate the aforementioned business, the bank could then advertise exclusively to these entities via the disclosed system.

Another example of advertising to advertisers within the instant system is a window manufacturer introducing a new window design and production technique. The window manufacturer could access the Home Services and/or Real Estate Related Services databases and target their advertising message to builders, architects, building supply centers, and remodeling contractors. Through the instant invention, product demonstrations and the manufacturing process could be shown to the target audience and product acceptance, inquiries, and orders could be monitored and obtained. At the same point, the disclosed system would allow the window manufacturer to advertise their new window design and production technique to the End User who could receive an electronic coupon redeemable at the local building supply center, thus generating store traffic for the retailer and providing accountability for the advertising message from manufacturer to wholesaler, to retailer, to the End User, and all through the instant invention.

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Users of the demographics generated by the instant invention can increase business to existing customers, generate new customers, and target potential customers early in their decision process.

The interactive advertising medium(s) provide a daily picture of America's real estate offerings and contain advertisements for related products and services. The present invention is a response tracking and retrieval system for interactive communications and provides detailed market data such as housing trends, purchase patterns, market cycles, demographics, and psychographics from inquiries and responses to information posed in the interactive advertising medium(s). This information can be used by industry-related businesses and services as well as marketers in general to define marketing programs and target audiences with information they are interested in receiving. The present invention is a real-time, response-driven, lead-generation, tracking system capable of generating direct response vehicles (i.e., coupons, reply and order mechanisms, etc.). In the present invention, because each property profile, advertisement, financial institution, etc. has its own identification code and each user of the interactive advertising medium(s) has their own access code, the present invention can provide detailed data on all aspects of viewership and response. When, where, and how often an advertisement and/or profile is viewed is instantly recorded by the present invention. As a result, viewership and response patterns can be retrieved by advertisers, real estate agents, and demographic subscribers to the present invention.

The interactive advertising medium(s) consists of interactive directories which communicate with each other in a synergistic manner. Except for restricted data, each directory has the ability to exchange data with the other, in one or more instances and simultaneously. The interactive advertising medium(s) are supplemental to, and used in conjunction with the present invention. As a result of the interactive advertising medium(s), the present invention provides the most comprehensive database of housing trends, demographics, lifestyles, purchase patterns, market cycles, and psychographics to entities seeking marketing research.

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Consumers can access the interactive advertising medium(s) and view properties according
to location, type (home, farm, estate, etc.), or price. Each selection will have full motion video
with stereo sound plus graphic display features. The interactive advertising medium(s) will have
information consisting of a property's interior/exterior scenes, maps, surveys, plats, and the
property's identification code. In addition, the listing agent's name and telephone number will
also be displayed (closed-captioning for the hearing impaired is also available). With a touch of
the screen, a remote control, or by voice command, the viewer can direct connect to the agent for
more information. Assuming desktop video capabilities are in place in the interactive advertising
medium(s) one can access the video-conferencing system for visual contact between the viewer and
listing agent. Video-conferencing is an integral part of the interactive advertising medium(s) and
one specific use is reviewing renderings and monitoring progress during different building phases
by the homeowners, contractors, architects, construction loan officers, and building inspectors.
Both electronic and voice mail also exist within the interactive advertising medium(s) so specifica-
tions and other text-based material and voice communications can occur rapidly and without time
zone interference.

Once the consumer chooses the property criteria they're interested in on an absolute or
range basis, (for example, number of bedrooms, baths, price range, style of house, square footage,
year of construction or age of house, etc.) a complete listing of properties matching that criteria is
displayed on the screen so individual property selections can be viewed and considered. A useful
checklist of items often overlooked when evaluating property is also available in the interactive
advertising medium(s). The checklist provides an easy way to record information on the
properties viewed in the response tracking and retrieval system for interactive communications or
the present invention.

With the interactive advertising medium(s) anyone involved in the leasing, sale, purchase,
or exchange of real estate can have a cost effective, efficient, and convenient means of retrieving
detailed information on real estate anywhere in America, 24 hours a day, 7 days a week, 365 days
a year, at their convenience and in the privacy of their own home.

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A consumer can view, via their multimedia device properties listed on the interactive advertising medium(s). This screen shows the consumer receiving audio and video information on a property listed with an Agent. In all cases, the property profile identification number is prominently displayed as is the contact person, regardless of how the property is being marketed (i.e., FSBO, Auction, or Agent). The consumer can directly communicate with the responsible party's office, home, mobile, or voice-mail telephone system through the Call Feature shown on the sample screen. The Fax Information Feature and Video Conference Feature can also be used as direct communication devices.

In fact, the Video Conference Feature has real-time, "open house" capabilities. This feature enables a consumer to participate in an "open house" with an agent or seller anywhere, anytime, without leaving their home. Interested parties can use a borrowed, rented, or their own video camera plugged into an audio/video input jack located on their multimedia device for communication. The Main Menu Feature puts the consumer back to the main menu of the advertising medium(s). Within the interactive advertising medium(s), the consumer or sales agent can highlight a certain portion of the home and zoom in to get a more detailed view. Future advances in virtual reality can also be available under the View Feature. With the Options Feature, consumers can search and/or save property profiles, or delete property profiles previously viewed. The Transaction Processing sub-directory which provides calendar scheduling can also be accessed under the Options Feature. With the response tracking and retrieval system for interactive communications, the present invention records all responses and inquiries to define the scope and level of interest the user has for a property offering or related product or service.

The interactive advertising medium(s) enables consumers to shop for properties of all types as well as ideas of all kinds. As an example, a consumer can view numerous property profiles to gather kitchen remodeling ideas and then save those kitchens that peak their interest. Using various features as illustrated at the top of the screen in the figure, the consumer can manipulate the kitchens to their liking, save these alterations under the Options Feature and use the Local Businesses Feature to access the Real Estate Related Services sub-directory and/or the

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Home Services sub-directory. With these two sub-directories, comparative shopping for building supplies, architects, decorators, remodeling contractors, appliance dealers, or any other type of goods or services needed to complete their kitchen dreams is a breeze. Once estimates, plans, and scheduling (scheduling is handled via Transaction Processing) were finalized, the consumer can obtain detailed information on financing the new kitchen via the Mortgage Qualification Feature.

The system of the present invention records all of these actions, and inquiries are recorded to define the scope and level of interest the user has for the property offering or related product or service. The Mortgage Qualification Feature as shown in the figure accesses the Mortgage Programs sub-directory, Personal Mortgage Analysis sub-directory, and the Mortgage Rates sub-directory. Using these sub-directories to compare loan terms and conditions, the consumer can communicate directly with the lending institution of their choice via the interactive advertising medium(s) Call Feature(s). Retrieving the property profile with the desired kitchen or the altered version as the case may be, the consumer can provide a complete project loan request to the lender through their multimedia device. Of course, the present invention can be used by the various information providers to keep the consumer abreast of new offerings or changes in the requests pending.

The interactive advertising medium(s) maintain a nationwide agent directory with agents' addresses, brokerage affiliation, phone numbers and area(s) of expertise and this information is used in a special segment of the present invention known as the Referral Network. Since the interactive advertising medium(s) have a nationwide database of all types of property, the agent can now become a "full-service" facilitator of their client's real estate needs. The interactive advertising medium(s) enhances the opportunity for an agent to not only increase their commissions but expand their market area. The tracking system of the present invention can be used for selecting all advertisements on the interactive advertising medium(s). Therefore, the market knowledge obtained by agents increased market presence will create a more informed agent. An agent marketing a client's home in Albuquerque can provide market data and property profiles for the client to review if, for instance, the client was moving to Boston. By analyzing the market inventory of a

certain price range and type of home in Boston through the present invention, the agent can then

search for agents (who specialize or have a significant market knowledge based on other informa-

tion available in the present invention to assist their client in the Boston area. The referral is

automatically registered to protect the referring agent and this provides additional income for the

two agents and their companies. Of course the tracking system is perpetuated by this new informa-

tion and this new information provides additional marketing research data for advertisers using

the interactive advertising medium(s).

Real estate professionals using the present invention can have reports on a local, state,

regional, or national format in minutes. For example, in the present invention, information

regarding sales-to-date, expired listings, listing inventory by price, property type or location, con-

tracts pending, and aged listing inventory on a monthly, quarterly, or annual basis is stored. Data

from one report, for example price, can be used in conjunction with a particular property type

file, say condominiums, to provide pricing and inventory analysis for that specific market. It

should be noted the response tracking and retrieval system used by licensed real estate agents will

contain information proprietary to just agents whose listing was viewed in the interactive adver-

tising medium(s).

The response and retrieval system for the interactive advertising medium(s) will have personal

access codes used for demographic information proprietary to just them and these personal access

codes will be used for billing purposes as well as security measures.

Management Services generates and confirms appointments and significant dates for all

parties involved in a real estate transaction. Specific information such as contracts pending and

closing dates are communicated to Agent Market Data for compilation and inventory reports.

Management Services can also be used in conjunction, for example, with Real Estate Related Serv-

ices to schedule appointments with attorneys, builders, home inspectors, bankers, or any other real

estate related service needed to complete the real estate transaction. The present invention cap-

tures this data as well and stores it all to track the actual closing time frame for real estate trans-

actions in any given market. As a result, when a homeowner asks how long it does it take on

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average to complete the sale of my home, the real estate sales agent can provide a substantive answer. This same scenario can be used by a home builder to accurately account for the time it takes to build a particular home thus minimizing penalties tied to completion date promises.

Agents continually attend courses to better themselves in the practices and responsibilities of their profession. Courses available to Agents for various certifications are plentiful and highly sought after. As can be expected, attending these classes requires time, money, and often traveling. With the interactive advertising medium(s), Agents can participate in courses designed to advance their careers. The use of interactive multimedia devices will create a "remote" classroom which will greatly enhance the professional agent. In this example, the present invention, or the response tracking and retrieval system used, provides educators with appropriate curriculum offerings for professional agents.

The Real Estate Agent can retrieve leads generated by their own specific Agent Property Profiles via Agent Leads in the interactive advertising medium(s). The Agents can also retrieve quantitative data on general viewership of any type of real property offerings seen on the interactive advertising medium(s) via the present invention. The present invention has the capability to segment and define just looking types from real bona fide buyers by categorizing the responses captured when the viewer was using the interactive advertising medium(s).In nearly every case, this information is available on-demand, for last week, prior month, previous quarter, or even last year. Because the interactive advertising medium(s) are not limited to locality or geographic boundaries, the interactive advertising medium(s), enable the Agent to obtain market data wherever the interactive advertising medium(s), are employed. The use of various directories and/or corresponding sub-directories in one combination or another within the present invention will provide extensive market data and research for the Agent.

As one example, the present invention gives Agents extensive information which can be used when obtaining property listings from owners. To get new listings, Agents can provide the owners with information regarding the length of time it currently takes to market their type of property, obtain a bona fide contract, and close on a property similar to the owners'. This infor-

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mation is derived from contracts pending, contracts closing, and sales-to-date data available in

Management Services and inventory reports available from Agent Market Data which compiles

quantitative property profile data from the FSBO, Auction, and Agent Listing PROPERTY

PROFILES. While accessing PROPERTY PROFILES (FSBO, Auction, and Agent Listings) collec-

tively provides the Agent and Owner with how many similar type properties are currently on the

market and marketed via the interactive advertising medium(s). As the premier interactive adver-

tising response system, the present invention provides accurate time-sensitive data through in-

tegrity driven checkpoints posed in the form of viewers using the interactive advertising

medium(s).

The interactive advertising medium(s), COMMUNITY INFORMATION Directory contains:

Community Profiles (a video vignette of communities); Government and Civic Organizations (a

graphical display of the community's government and civic organizations); Events and Attractions

(such as sports, recreational facilities, arts and entertainment, special attractions (amusement

parks), and annual events; and an extensive list of Educational Facilities which provide End

Users with information on schools. the interactive advertising medium(s) COMMUNITY INFOR-

MATION Directory can provide information on schools, civic organizations, and churches which

often Agents are not permitted by ethics or law to discuss. Inquiries into these directories are re-

corded by the present invention and used by sponsors of the message seen in the interactive adver-

tising medium(s) for additional follow-up, cross-sell and promotion as to other products or serv-

ices.

The interactive advertising medium(s), LOCAL BUSINESSES AND SERVICES directory

also has sub-directories. All of these sub-directories contain paid infomercials from advertisers

and the present invention accurately records and determines viewership in terms of length of view-

ing pattern, any inquiry into a particular product or service offered during the course of the in-

fomercial and, most importantly, provides this data to the sponsor.

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In the interactive advertising medium(s), Real Estate Related Services Directory one will find information on attorneys, mortgage companies, architects, builders, moving companies, and property management. Any inquiry or viewership of information found will be recorded and stored for the sponsor to retrieve and use. From an invention point-of-view, data regarding services offered by the aforementioned advertisers can be used by the sponsors as well as third parties such as property insurance under-writers, building supply centers, appliance dealers, and appraisers of real property.

In the interactive advertising medium(s), Home Services Directory, consumers can find a decorator, lawn and garden purveyor, painter, and/or do some comparison shopping for furniture, appliances, draperies, wall coverings, floorings, or building supplies all in the comfort of their home. Marketers of such goods can evaluate competitive practices and determine market demand to assist in inventory selection, anticipate purchases for related items and target viewers with coupons or other store-traffic generation devices as a result of the present invention.

If a trip to the community viewed is forthcoming, consumers can find a motel, hotel, or even a bed and breakfast when they access the interactive advertising medium(s), Local Restaurants and Lodging Directory. With a touch of the screen, a remote control, or a simple voice command, the viewer can direct connect to the local lodging or restaurant of their choice and make reservations. The present invention will track the request for accommodations and provide participating restaurants with information regarding the user s destination, estimated time of arrival and departure so the restaurant owner can promote his eatery to the viewer in his hotel room through the interactive advertising medium(s).

The interactive advertising medium(s), REAL ESTATE FINANCING system enables both real estate professionals and consumers to retrieve data on financing options via four sub-directories: Real Estate Notes, Mortgage Programs, Personal Mortgage Analysis, and Mortgage Rates. Real Estate Notes contains a compilation of real estate notes offered for sale, servicing, or exchange on a local, state, regional, or national basis. Note-holders advertising notes on the system can include information regarding face value, issue and maturity dates, yield, collateral descrip-

tion, and pricing. The present invention can identify market trends in each of these informa-

tional categories and provide investors in these instruments with valuable insight as to market con-

ditions.

In the interactive advertising medium(s), Mortgage Programs, viewers will find detailed in-

formation about VA, FHA, and Conventional mortgage programs a well as Jumbo, Adjustable

Rates, Fixed Rate, and hybrid programs. Under Mortgage Rates, a timely compilation of mortgage

rates is maintained and kept on a local, state, regional, and national basis for comparison and

availability. The present invention can identify trends in each of these informational categories

and provide investors in these instruments with valuable insight as to market conditions. Lending

institutions can also use the tracking system of the present invention for competitive pricing

analysis and determine product demands. Additionally, the system can be used by traders in

mortgage-backed securities to spot market trends and opportunities.

The interactive advertising medium(s), Personal Mortgage Analysis Sub-Directory enables

a user to enter personal data in regards to mortgage qualification parameters (obtained in the

Mortgage Program Sub-Directory and discussed above) and pre-qualify for a mortgage based on

information obtained from the Mortgage Rates Sub-Directory. These sub-directories can interface

with the property profiles the end user previously viewed and produce an on-screen financing

program for each property viewed - complete with monthly payment, escrow, down payment and

closing cost considerations (fax-back capability is also present). The interactive advertising

medium(s), also works in reverse, once a property profile has been played, the viewer will have the

option of viewing financing alternatives. Advertisers such as banks and mortgage companies

found in REAL ESTATE FINANCING can supply their various mortgage programs to the

database. These sub-directories interface with one another and can be utilized to compare loan

terms offered by various lenders. Here again, the present invention can identify trends in each of

these informational categories and provide investors in these instruments with valuable insight as

to market conditions. The present invention can also be used by traders in mortgage-backed

securities to spot market trends and opportunities.

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In regard to properties offered, Advertisers, Real Estate Agents, and Subscribers to the interactive advertising medium(s), response tracking and retrieval system can retrieve viewership response patterns via four sub-directories: Property Inquiries, Property Retrievals, Advertiser Inquiries, and Advertiser Retrievals. Property Inquiries consists of all qualitative inquiries generated by viewers seeking more information on specific property profiles viewed on the interactive advertising medium(s). Property Retrievals is generated by viewership of any property profiles wherein the viewer may or may not be interested in pursuing the transaction but has viewed the property. Advertising Inquiries comprises all qualitative inquiries generated by viewers seeking more information on specific goods or services advertised on the interactive advertising medium(s). Advertiser Retrievals is generated by viewership of any advertising message wherein the viewer may or may not be interested in obtaining more information about the advertiser's goods and/or services. All viewership and responses thereto, are captured and stored providing easy access and manipulation for subscribers to the tracking system of the present invention. Data is continually updated to ensure accurate, up-to-date information at all times so viewership and exposures as well as inquiries and/or responses can be retrieved on a National, Regional, State, or Local basis. Custom retrievals as a result of testing various advertising appeals/offers are also available. The present invention can also provide levels of interest and psychographic profiles by questioning viewers at various points while viewing any property or advertising message.

As an example, a bank which advertises its mortgage programs and rates in the interactive advertising medium(s) can use the present invention to determine if there was an increasing demand for housing in their area which can bring new deposit account relationships as well as the opportunity to book new mortgages. If housing demands were increasing as revealed by information retrieved on the interactive advertising medium(s), the bank can rationalize the approval of a new development loan to a developer and subsequent credit line extensions to area builders, general contractors, excavation companies, paving contractors, building supply centers, plumbing and painting companies, appliance dealers, and any other type of related business or service provider needed to fulfill the anticipated demand. To generate the new business, the bank can

then target their advertising exclusively to those entities via the interactive advertising medium(s) and, in turn, each of the aforementioned bank customers and primarily the real estate developer, can advertise the new development on the interactive advertising medium(s) to end users. Viewership patterns and inquiries can help monitor the opening of new phases in the development and level supply with demand through the present invention. Builders as well as each of the aforementioned product or service entities can use the present invention to determine market conditions. Thus speculation as to market demands and supply is defined and substantiated versus narrowly forecasted as under the prior art.

In the public sector, both local and state governments can use the present invention to forecast demand for public goods and services such as new roads, schools, parks, and utility requirements. As a side note, this same sector of the economy can sponsor the information contained in Community Profiles. In most cases, an advertiser of any type of goods or services can be a user of the present invention since it accounts for their advertising dollar through measurable tracking and identifies where to concentrate future advertising expenditures. Accordingly, an advertisers message in terms of effectiveness is substantiated through the present invention. The present invention enables customized reports of all types to businesses and services which can use the data to determine market conditions and trends and generate forecasting modules.

An example of the use of the tracking information provide by the tracking system of the present invention to promote business to business relationships within the interactive advertising medium(s) is a window manufacturer introducing a new window design and production technique. The window manufacturer can access the interactive advertising medium(s) Home Services and/or Real Estate Related Services and target their advertising message to builders, architects, building supply centers, and remodeling contractors. Product demonstrations and the manufacturing process can be shown to the target audience and product acceptance, inquiries, and orders, can be monitored and obtained. The present invention eschews wasted circulation of follow up collateral materials from advertisers by using the data produced by the present invention. At the same time, the interactive advertising medium(s) enable the window manufacturer to advertise

their new window design and production technique to the end user who can receive an electronic

coupon redeemable at the local building supply center, thus generating store traffic for the

retailer and providing accountability for the advertising message from manufacturer to

wholesaler, to the end user, to retailer, and all through the interactive advertising medium(s).

In the end, the present invention supplies advertisers, real estate agents, and demographic

subscribers with a daily picture of the local, state, regional, and national real estate market.

Property inquiries from one geographic location to another are recorded so moving patterns can be

traced. Demographic data compiled, merged, and sorted can be used for a variety of purposes, but

market trends and research as well as targeting advertising messages is the primary use.

Users of interactive advertising mediums can benefit from the present system's response

tracking and retrieval system database of marketing research files to increase business to existing

customers, generate new customers, and target potential customers early in their decision process.

In the public sector, both local and state governments can use the instant system to forecast

demand for public goods and services such as new roads, schools, parks, and utility requirements.

As a side note, this same sector of the economy could sponsor the information contained in the

Community Profiles Database. In most cases, an advertiser of any type of goods or services on the

disclosed system would be a user of the demographic retrievals since it accounts for their advertis-

ing dollar and identifies where to concentrate future advertising expenditures.

The mainframe, or computer used as a Server, can be any one of many known computers,

such as an IBM /370 running MVS and VTAM and any of many available database and support

programs, or a Sun workstation running UNIX and any of many database programs available.

The specific property profiles of individual properties are preferably stored as individual records

of a database file containing all such records, or some portion thereof. Preferably the records con-

tain relevant information located in appropriate fields, including fields containing the digitized

images and audio, or an address where the digitized images are located. Preferably the Server has

a system with appropriate password entry and protection abilities. The software on the Server has

codes present for blocking out certain fields of the specific property file records, or certain infor-

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mation for the property files which contains specific information intended for the Real Estate

Agent's access, but not the End User's or Subscriber's access. This function can alternatively be

performed at the End User's or Subscriber's terminal.

The display portion of the foregoing multimedia device 300 can be a television, computer

monitor, high density television or virtual reality device. Although the current virtual reality

devices are expensive and have not yet reached their full potential, they would provide enhanced

viewing of the property. As display technology improves, enhanced viewer involvement with

properties will also occur. The instant system allows the flexibility to incorporate any of the cur-

rent, as well as the future, technologies.

The software for configuring the system is easily built using standard database develop-

ment techniques well known to those skilled in the art, based on the configurations described

herein and the selection of the desired options. The multimedia terminals may be common per-

sonal computers, such as an IBM or compatible with a 386 microprocessor, appropriate video for

displaying graphics, and a sound card for audio. Software for controlling the communication with

the Server can be Windows based, and is easily built using known techniques based on the con-

figurations described herein. An alternative End User system utilizing a cable television network

and decoder box can also be implemented using known techniques.

Due to the versatility in programming, different categories of access codes can be imple-

mented depending on a user's classification. Access codes can also determine the billing rate for

the user. Prospective home purchasers could pay for the service viewed in their home on a time

usage basis and billing could occur through their local cable company or other entity.

The following is an example of a system of the instant invention. This example is for il-

lustration purposes and should not be viewed as limiting the scope of the invention. The Server's

processor is presently at a centralized location, and all Agent, Media, Subscriber, Advertiser and

End User units tie into this centralized unit. The Media multimedia devices include an image

scanner which digitizes photographs, an A/D converter, and microphone for audio scripts. At the

Media's location, advertisements for property are produced which contain a digitized picture or

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series of pictures, and a voice description of aesthetic elements of the property. Information

describing the important features of the property, including acreage, rooms and room sizes, ad-

dress, owner, the listing Agent and other relevant information are entered by a computer keyboard

present in the Media's multimedia device. The assembled information on a given property is com-

pressed and sent via modem over telephone lines to a computer, where a file in a database is

produced containing all relevant information. Before being sent to the computer, the assembled

information may be sent to a Real Estate Agent for approval and modification.

An End User interested in purchasing a property has a microcomputer with the required

multimedia capability and installed software enabling an interactive session to be established with

the computer via a modem and telephone lines. The End User begins by logging onto the system

and giving an identifier which enables the system to give End User level access. The End User

enters information about their needs which includes intended purchase price range, property type,

geographical interests, and the like. A menu is presented through which the End User can select

from several options including mortgage information, community information, property informa-

tion and industry-related goods and/or services from Advertisers. Based on the End User's infor-

mation, a set of property or advertisement files are sent via the compress/decompress units and

modems to the End User. The End User can then browse through the property profiles, viewing

the digitized pictures while listening to detailed property descriptions.

If the End Users find properties which they are interested in, the End Users can then go to

a Real Estate Agent to have the property shown. At the Real Estate Agent's office, an Agent's

multimedia system, including a compress/decompress unit, a modem, and multimedia computer, is

present. The Agent can gain access to information on properties to which the End Users were

prevented access, such as the precise address and owner's telephone number, and, through this addi-

tional information, arrange to show the property to the interested party.

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What is Claimed is:

1.   An information processing system for acquiring and displaying real estate related information comprising:

   a)   file server means for serving files;

        said file server means having:

        i)   i/o means for receiving and transmitting data,

        ii)   database storage means for storing information in

               database files, wherein said database files are

               configured for storing digital real estate

               information;

   b)   media terminal means for producing files, including

        digitized property information, said media terminal means having:

        i)   digitizing means for producing digitized real estate property information by

             digitizing analog signals, and

        ii) i/o means for receiving and transmitting digitized property information;

   c)   end user terminal means for entering data, transmitting

        said data to said file server means, and receiving and displaying data received from

        said file server means including said digitized property information;

      said end user terminal means having:

        i)   data entry/display means for inputting and displaying data, and

        ii) i/o means for receiving and transmitting data;

   d)   Agent terminal means for entering data, transmitting information to said file server

        means, receiving and displaying data received from said file server means, said Real

      Estate Agent terminal having:

        i)   data input/display means for inputting and displaying data,

        ii) i/o means for receiving and transmitting data;

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said i/o means of said file server means being configured to enable information

transfer with the i/o means of said media, said end user, and said agent terminals;

wherein said system is configured such that digital real estate information, including said

digitized property information, is received at said file server means, transmitted from the

i/o means of said media terminal means; said received digital real estate information being

stored in said file server database storage means; portions of said digital real estate infor-

mation is transmitted to said end user terminal means; and digitized property descriptions

received at said end user terminal means is displayed for viewing.

2.   The information processing system for acquiring and displaying real estate related informa-

tion of claim 1 wherein:

        said media terminal means, end user terminal means, and agent terminal means each fur-

                ther comprises compression/decompression means for compressing and decompress-

                ing files for storage and/or transmission.

3.   The information processing system for acquiring and displaying real estate related informa-

tion of claim 1 wherein:

        said data base storage means of said file server means further comprises means for storing

                demographic information; and

        said end user terminal means and said agent terminal means are configured to select from,

                receive, and display said demographic information for display.

4.   The information processing system for acquiring and displaying real estate related informa-

tion of claim 1 wherein:

        said data base storage means of said file server means further comprises means for storing

                advertising information; and

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wherein said end user terminal means and said agent terminal means are configured to
select from, receive, and display said advertising information for display.

5.   The information processing system for acquiring and displaying real estate related informa-
tion of claim 1 wherein:

    said data base storage means of said file server means further comprises means for storing
        financial information; and

    wherein said end user terminal means is configured to select from, receive, and display
        said financial information for display.

6.   The information processing system for acquiring and displaying real estate related informa-
tion of claim 1, wherein:

    said file server means further includes information lock-out means, whereby said file
    server means is configured to prevent certain information from being accessed or sent to
    said End User terminal means, and configured to make available said certain information
    to said Agent terminal means.

7.   The information processing system for acquiring and displaying real estate related informa-
tion of claim 1, wherein:

    said end user terminal means further comprises a cable television converter.

8.   The information processing system for acquiring and displaying real estate related informa-
tion of claim 1 wherein:

    said end user terminal means further comprises a microcomputer.

9.   The information processing system for acquiring and displaying real estate related informa-
tion of claim 1 wherein:

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said data base storage means for storing digitized property descriptions further comprises

means for storing scanned graphics images; and

wherein said digitization means of said media terminal means includes an image scanner.

10.   A method of acquiring and displaying real estate related information utilizing an informa-

tion processing system containing file server means for serving files, said file server means

having i/o means for receiving and transmitting data, and database storage means for stor-

ing information in database files, the method comprising the steps of:

a) digitizing analog property descriptions of real estate properties to produce digitized

property descriptions;

b) entering real estate information on said real estate properties;

c) storing said digitized property descriptions and said real estate information as property

records in said database storage means of said file server means in a manner

in which data can be selectively accessed;

d) receiving digital electronic end user information from an end user relating to the end

user's real estate needs;

e) selectively providing digital electronic information of portions of said property records

based on said digital electronic end user information, and not providing a

portion of the real estate information of said property records which is made

unavailable to said first end user; and

f) providing said digitized property descriptions and real estate information to a agent in

a form in which it can be viewed, based on information given by the agent,

wherein

said portion of the real estate information which was not available to

said end user is provided to said agent.

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11. The method of acquiring and displaying real estate information of claim 10, further comprising the steps of:

a) entering advertising information in real estate related areas;

b) storing said advertising information as advertising records in said database storage means of said file server means in a manner in which data can be selectively accessed;

c) receiving digital electronic end user information from an end user relating to the end user's purchasing needs;

d) selectively providing digital electronic information of portions of said advertising records based on said digital electronic end user information,

e) providing said advertising information to a agent in a form in which it can be viewed, based on information given by the agent

12. The method of acquiring and displaying real estate information of claim 10, wherein the steps of digitizing analog property information, receiving digital electronic end user information, providing digital electronic information to an end user and providing digitized property descriptions and digital real estate information to a agent further include:

the steps of compressing and decompressing said electronic information.

13. The method of acquiring and displaying real estate information of claim 10, further including the steps of:

a) storing demographic information in said database storage means of said file server means; and

b) providing a second end user with demographic information, in accordance with selections made by said end user.

14. The method of acquiring and displaying real estate information of claim 10, further including the steps of:

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a) storing financial information in said data base storage means of said file server means; and

b) providing an end user with financial information, in accordance with selections made by said end user.

15. The method of acquiring and displaying real estate information of claim 10, further includ-ing the steps of:

a) storing community information in said data base storage means of said file server means; and

b) providing an end user with community information, in accordance with selections made by said end user.

16. The method of acquiring and displaying real estate information of claim 10, wherein:
    the step of selectively providing digital electronic information to said end user comprises sending a signal through a cable television line to a cable television converter.

17. The method of acquiring and displaying real estate information of claim 10, wherein:
    the step of selectively providing digital electronic information to said end user comprises sending a signal through a modem to a digital computer.

18. The method of acquiring and displaying real estate information of claim 11, wherein:
    the step of digitization comprises image scanning of an image or set of images.

19. An information processing system for acquiring and displaying real estate related informa-tion comprising:
    file server means for serving files, said file server means having:
        a modem for receiving and transmitting data;

database storage means for storing information in database files;

    said database files having

        digitized property information,

        community information,

        advertising information,

        mortgage information;

media terminal means for producing files including digitized property descriptions, said

media terminal means

    having:

    digitizing means for producing digitized property descriptions by digitizing analog

        signals,

      said digitizing means having an image scanner;

    a modem for receiving and transmitting data;

    compression means for compressing and decompressing files;

    end user terminal means for entering data, transmitting said data to said file server

        means, and receiving and displaying data received from said file server

        means including said digitized property descriptions,

      said end user terminal means having:

        data input/graphics display means for inputting data and displaying

            graphics;

        a modem for receiving and transmitting data;

        compression means for compressing and decompressing files;

    Real Estate Agent terminal means for entering data, transmitting information to

        said file server means, receiving and displaying data received form said file

        server means, including said digitized property information,

    said Real Estate Agent terminal having:

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data input/graphics display means for inputting data and displaying

graphics;

a modem for receiving and transmitting data;

compression means for compressing and decompressing files;

said i/o means of said file server means configured to enable information transfer

with the i/o means of said media, end user, and agent terminals;

wherein said system is configured such that digital real estate information including

said digitized property descriptions is received in said file server means from said i/o

means of said media terminal means; said received digital real estate information is stored

in said file server database storage means; portions of said digital real estate information is

transmitted to said end user terminal means; and digitized property descriptions received at

said end user terminal means is displayed for viewing.

20. A system of tracking information using a computer network comprising:

a media's unit, said media's unit having:

a multimedia personal computer;

a digitizer, said digitizer being in communication   with databases outside said

network system and with said multimedia personal computer;

a compress/decompress unit, said compress/decompress unit being in communication

with said multimedia personal computer;

a modem, said modem being in communication with said compress/decompress unit;

a server's unit, said server's unit having:

a computer, said computer having storage capabilities;

a modem, said modem being in communication with said computer;

database files, said database files being stored in said computer;

an agent's unit, said agent's unit having:

a computer, said computer having display means and input means;

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a compress/decompress unit, said compress/decompress unit being in communication

with said computer;

a modem, said modem being in communication with said compress/decompress unit;

a subscriber's unit, said subscriber's unit having:

converter means, said converter means having the capabilities of

compression/decompression, transmission;

a viewing screen;

entry means;

a plurality of databases, said plurality of databases being stored in said Server's computer

and accessible through said Server's modem.

Claim 21.   The system of tracking information using a computer network system of Claim 20

wherein said databases further comprise access software, said access software having access codes,

said access codes corresponding to each of said databases.

Claim 22.   The system of tracking information using a computer network system of Claim 20

wherein said agent's computer further comprises storage capabilities.

Claim 23.   The system of tracking information using a computer network system of Claim 21

wherein said access codes allow transmission of data from corresponding databases.

Claim 24.   The system of tracking information using a computer network system of Claim 20

wherein the data from said databases is in the form of video.

Claim 25.   The system of tracking information using a computer network system of Claim 20

wherein the data from said databases is in the form of graphics.

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Claim 26.   The system of tracking information using a computer network system of Claim 20 wherein the data from said databases is in the form of text information.

Claim 27. The method of tracking information using a computer network comprising the steps of:

receiving data,

transmitting said data to a media's computer,

displaying said data on said media's computer for editing by a media user,

transmitting said edited data from said media's computer to a media's compress/decompress

unit,

compressing said data at said media's compress/decompress

unit,

transmitting said compressed data to a media's modem,

transmitting said compressed data through said media's modem to an agent's modem,

transmitting said compressed data from said agent's modem to an agent's

compress/decompress unit,

decompressing said data at said agent's compress/decompress unit,

transmitting said decompressed data to an agent's multimedia device,

displaying said data on said agent's multimedia device for editing by an agent user,

transmitting said edited data to said agent's compress/decompress unit,

compressing said data at said compress/decompress unit,

sending said compressed data to said agent's modem,

transmitting said compressed data from said agent's modem to said media's modem,

transmitting said compressed data from said media's modem to said media's

compress/decompress unit,

decompressing said data at said compress/decompress unit,

transmitting said decompressed data to said media's multimedia device,

displaying said data on said media's multimedia for editing by an media user,

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transmitting said data from said media's multimedia device to said media's

compress/decompress unit,

compressing said data at said media's compress/decompress unit,

transmitting said compressed data from said compress/decompress unit to said media's

modem.

transmitting said compressed data from said media's modem to said server's modem.

transmitting said compressed data from said server's modem to said server's computer for

storage.

Claim 28. The method of tracking information using a computer network system of Claim 27 wherein said data is received from an external source.

Claim 29.   The method of tracking information using a computer network system of Claim 28 wherein said external source is a modem.

Claim 30.   The method of tracking information using a computer network system of Claim 28 wherein said external source is a personal computer.

Claim 31. The method of tracking information using a computer network system of Claim 28 wherein said external source transmits analog data.

Claim 32.   The method of tracking information using a computer network system of Claim 21 wherein said analog data is transmitted through a digitizer, said digitizer converting said data to computer readable format.

Claim 33. The method tracking information using a computer network system wherein an agent user gains access to a plurality of databases through the steps of:

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a. requesting data from said databases through an agent's computer,

b. transmitting the data request from agent's computer to an agent's compress/decompress unit,

c. transmitting said compressed data request from said compress/decompress unit to an agent's modem,

d. transmitting said compressed data request from said agent's modem to a server's modem,

e. transmitting said compressed data request from said server's modem to a server's computer,

f. activating the databases to provide the requested data,

g. retrieving said requested data from storage, and returning said data to said agent user through the steps of

h. transmitting said compressed requested data from said server's computer to said server's modem,

i. transmitting said compressed requested data from said server's modem to said agent's modem,

j. transmitting said compressed requested data from said agent's modem to said compress/decompress unit,

k. decompressing said requested data,

l. transmitting said decompressed data to said agent's personal computer for display.

Claim 34. The method tracking information using a computer network system of Claim 33 wherein an agent user gains access to databases through use of an access code, said access code corresponding to at least one of said plurality of databases.

Claim 35. The method tracking information using a computer network system wherein a user gains access to a plurality of databases through the steps of:

a. entering a data request from said databases through a user's entry means,

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b. compressing said data request being transmitted from said user's entry means to user's converter means,

c. transmitting said compressed data request from said converter means to a file server's modem,

d. transmitting said compressed data request from said server's modem to said file server's computer,

e. activating the databases to provide the requested data,

f. retrieving said requested data from storage, and

returning said data to said user through the steps of:

g. transmitting said compressed requested data from said server's computer to said server's modem,

h. transmitting said compressed requested data from said server's modem to said user's converter means,

i. decompressing said requested data in said user's converter means,

j. displaying said requested data on user's viewing means.

Claim 36. The method of tracking information using a computer network system of Claim 35 wherein an subscriber user gains access to databases through use of an access code, said access code corresponding to at least one of said plurality of databases.

37.   The method of tracking demographic information by producing a compilation of data, comprising the steps of:

entering a plurality of inquiries from a first user into a computer,

coding said first user inquiries,

storing said coded inquiries in a computer file,

entering a plurality of inquiries from at least a second user into said computer,

coding said plurality of inquiries from said at least a second user,

each inquiry code representing an inquiry category,

storing said second user inquiry codes in said computer file,

retrieving inquiries by inquiry codes,

calculating parameters relating to retrieved inquiry,

displaying on a display terminal, said parameter relating to said inquiries.

38.   The method of claim 37, wherein said retrieved inquiries correspond to the number of inquiries relating to a particular code.

39.   The method of claim 37, further comprising the steps of a user entering a series of responses corresponding to said series of predetermined inquiries,

and analyzing said series of responses and providing selected information, said information being selected by matching user responses to predetermined categories of information, and displaying selected information on user terminal.

40.   The method of claim 37, wherein an inquiry relates to an advertisement for a product or service.

41.   The method of claim 37, wherein said user inquiry is for information relating to real estate within a predetermined cost range, and further comprising the steps of retrieving codes corresponding to real estate construction companies which construct buildings within said predetermined cost range, storing said list in the memory of a computer data bank, and displaying said list on a display terminal.

42.   The method of claim 37, wherein said user inquiry is for information relating to real estate within a predetermined cost range, and said information is mortgage rates for real estate within said predetermined cost range,

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further comprising the steps of retrieving codes corresponding to financial institutions financial

institution which are currently providing loans for the acquisition of real property in the user's

price range, and

displaying on user's display terminal a list of financial institutions which are providing loans for

the acquisition of real property in the user's price range.

43. The method of claim 42, wherein said user inquiry is additionally for information relating to

structures by type, price range and age,

displaying on user's terminal a list of companies which provide remodeling services for structures

of the type, price range and age of the structure identified by user in user's inquiries.

44.   The method of claim 37, wherein at least a plurality of said codes represent a real estate

property characteristic.

45.   The method of claim 37, said user inquiries represent a plurality of units of demographic

information,

        each of said predetermined units being assigned a particular identification code,

        each of said predetermined units being stored in a database in a manner to be accessible by

said identification codes,

        wherein demographic information is stored in said database and is retrieved by identifica-

tion codes, said retrieved information being displayed on a terminal in the form of statistical

demographic information.

46.   The method of claim 42, wherein the demographic information includes the length of time

it currently takes to market a specific type of property, obtain a sales contract, and complete the

sale of said property

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47.   The method of claim 37, further comprising the step of recording the time period during which a real estate property profile is viewed by a user, assigning a code to said viewing time period, storing said code, collecting the plurality of codes relating to viewing time periods for a particular real estate property profiles, and converting said plurality of codes into a second code which represents viewer interest value in a particular property, displaying on a terminal, the viewer interest value corresponding to said second code.

48.   The method of claim 37, comprising the step of storing in a computer memory, a code corresponding to at least one of the time period and number of advertiser information retrievals by users,

49.   The method of claim 37, further comprising the step of assigning a code to said viewing time period and said number of retrievals, storing said code, collecting the plurality of codes relating to said advertiser information retrievals, and converting said plurality of codes into a second code which represents viewer interest value in a particular advertiser information, displaying on a terminal, the viewer interest value corresponding to said second code.

50.   The method of claim 48, wherein said computer memory is a magnetic storage medium.

51.   The method of claim 45, wherein said demographic information includes property inquiries from one geographic location, for property in another geographic location, said geographic locations are recorded and moving patterns are tracked.
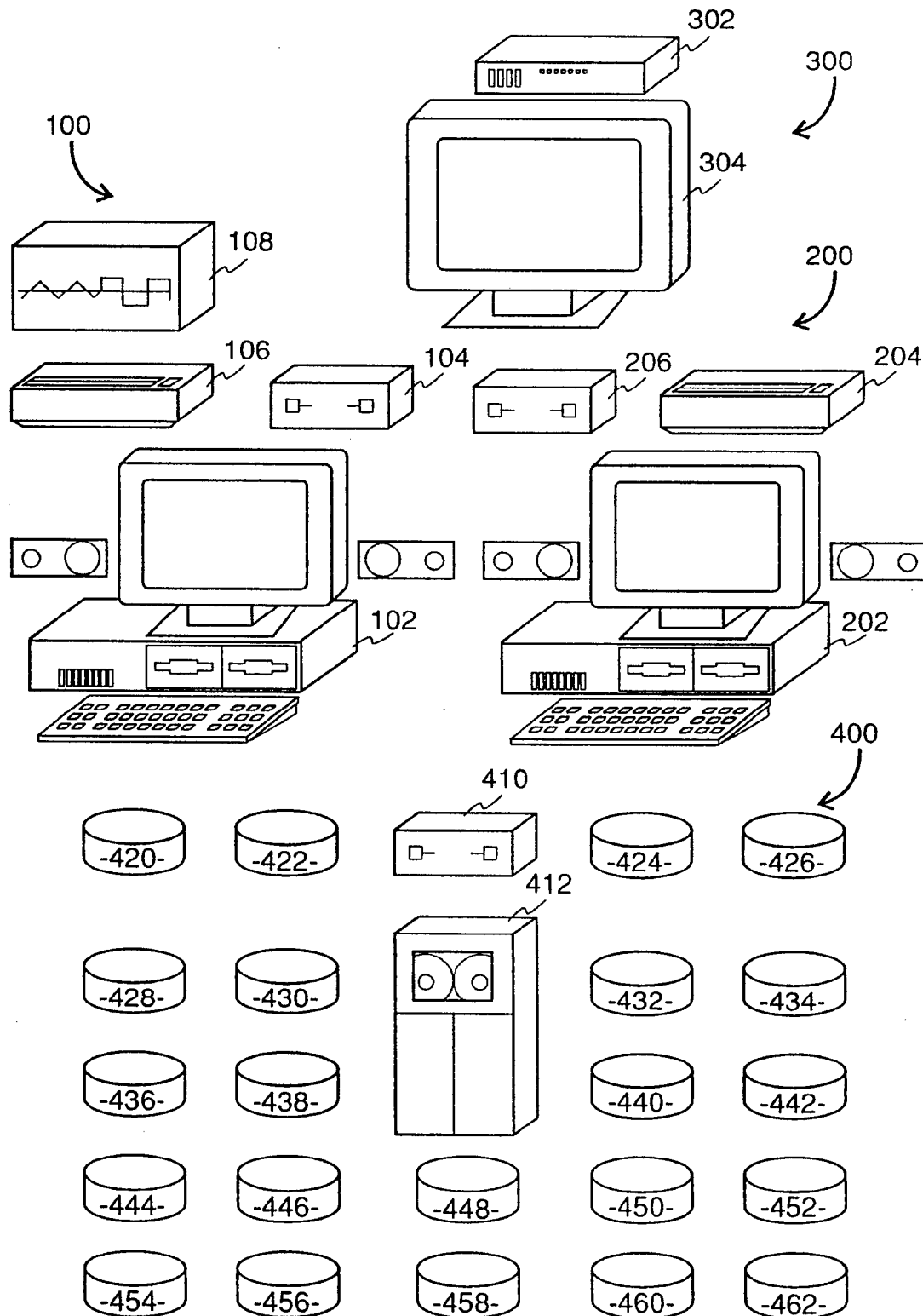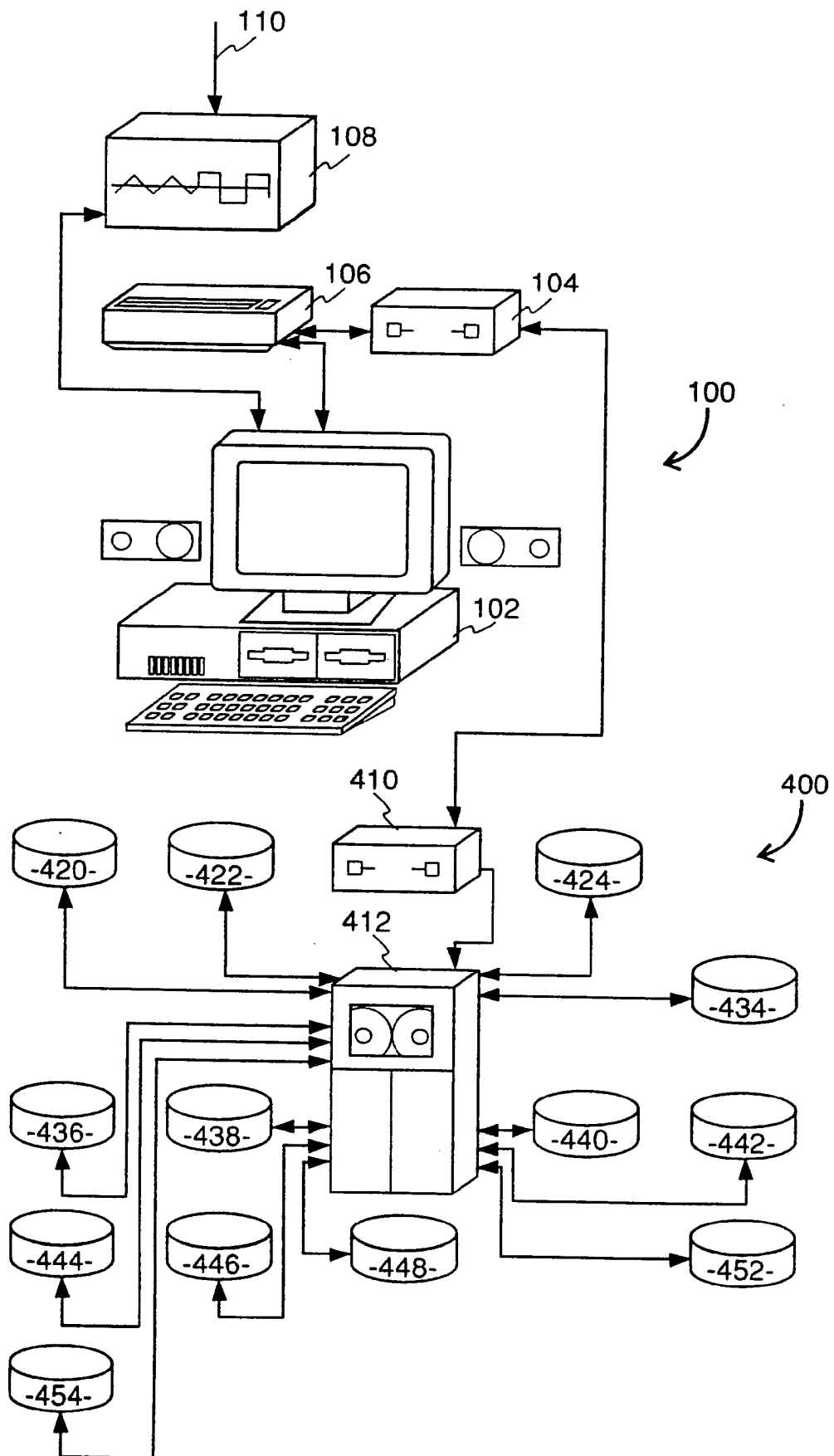
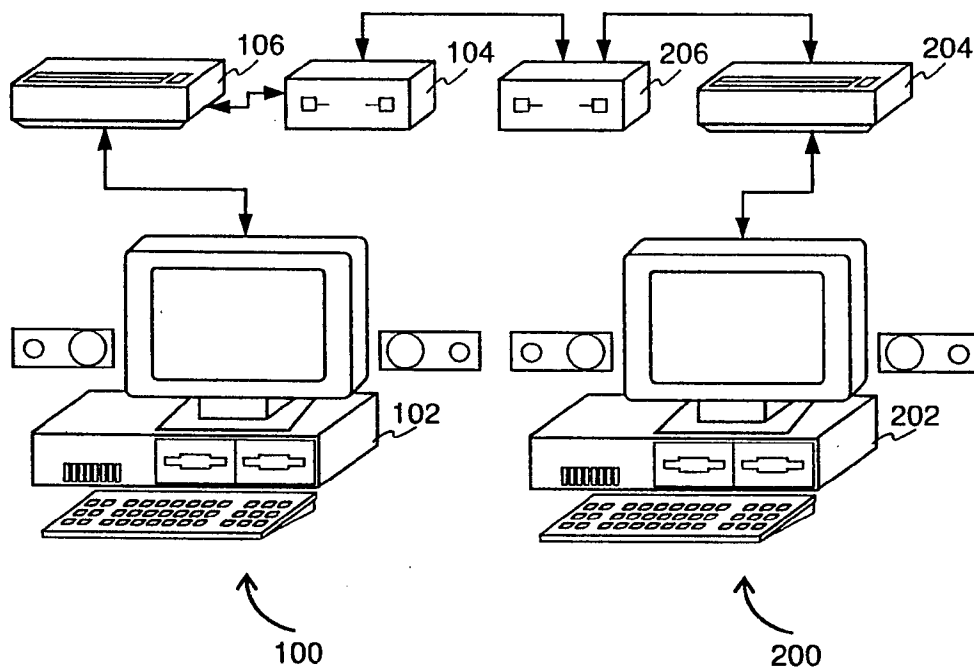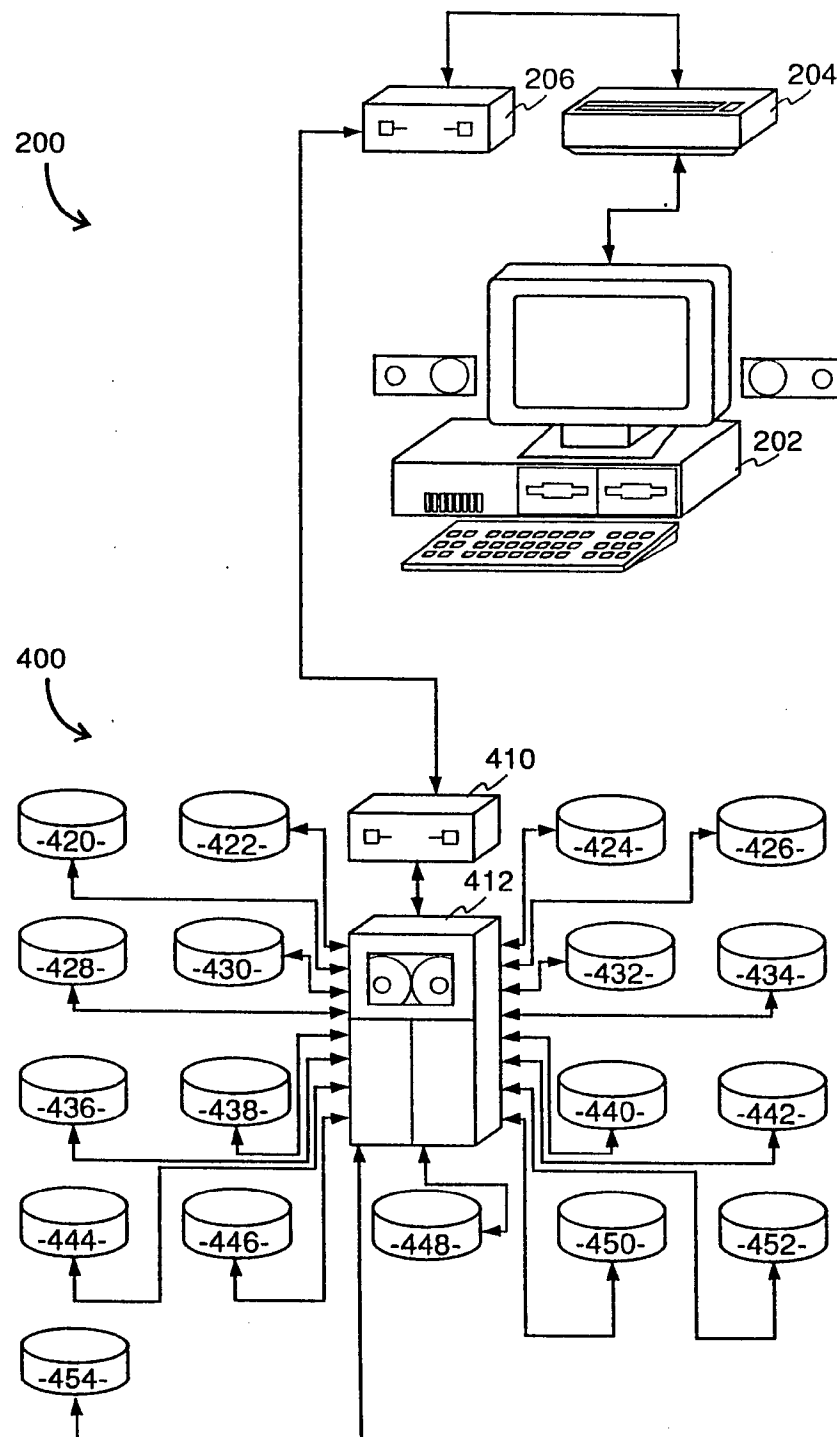**Fig. 1**

Fig. 2　 SUBSTITUTE SHEET (RULE 26)

Fig. 3

200

206   204

202

400

410

412

-420-   -422-   -424-   -426-

-428-   -430-   -432-   -434-

-436-   -438-   -440-   -442-

-444-   -446-   -448-   -450-   -452-

-454-

Fig. 4

Fig. 5

Fig. 6

Fig. 7

700
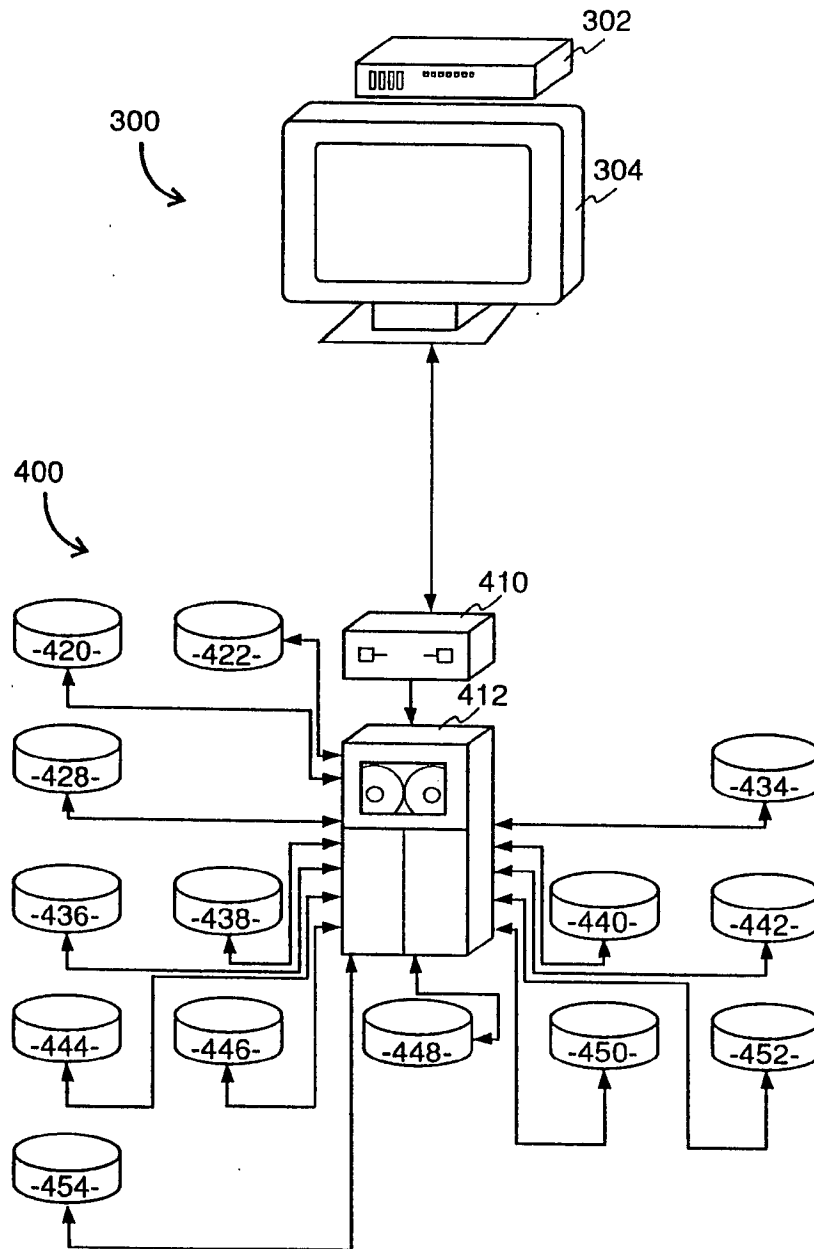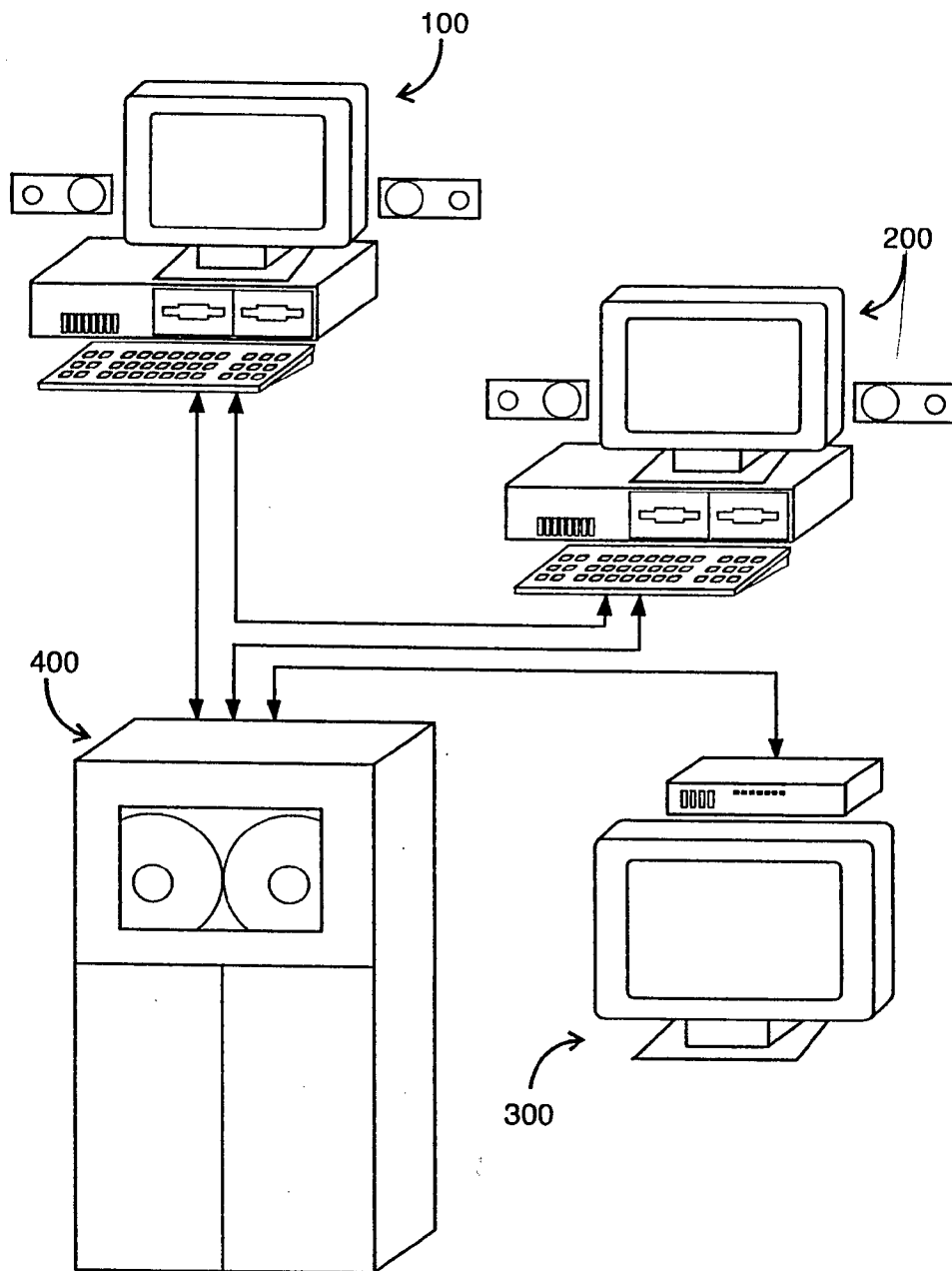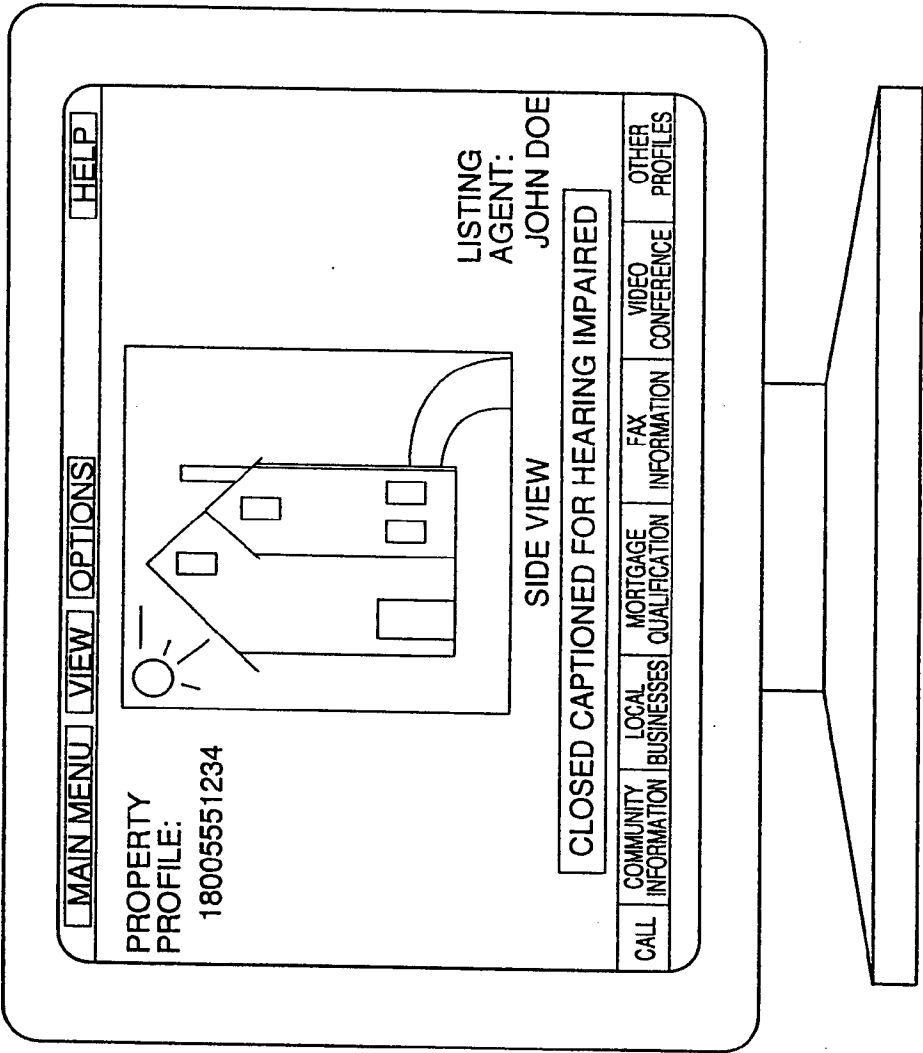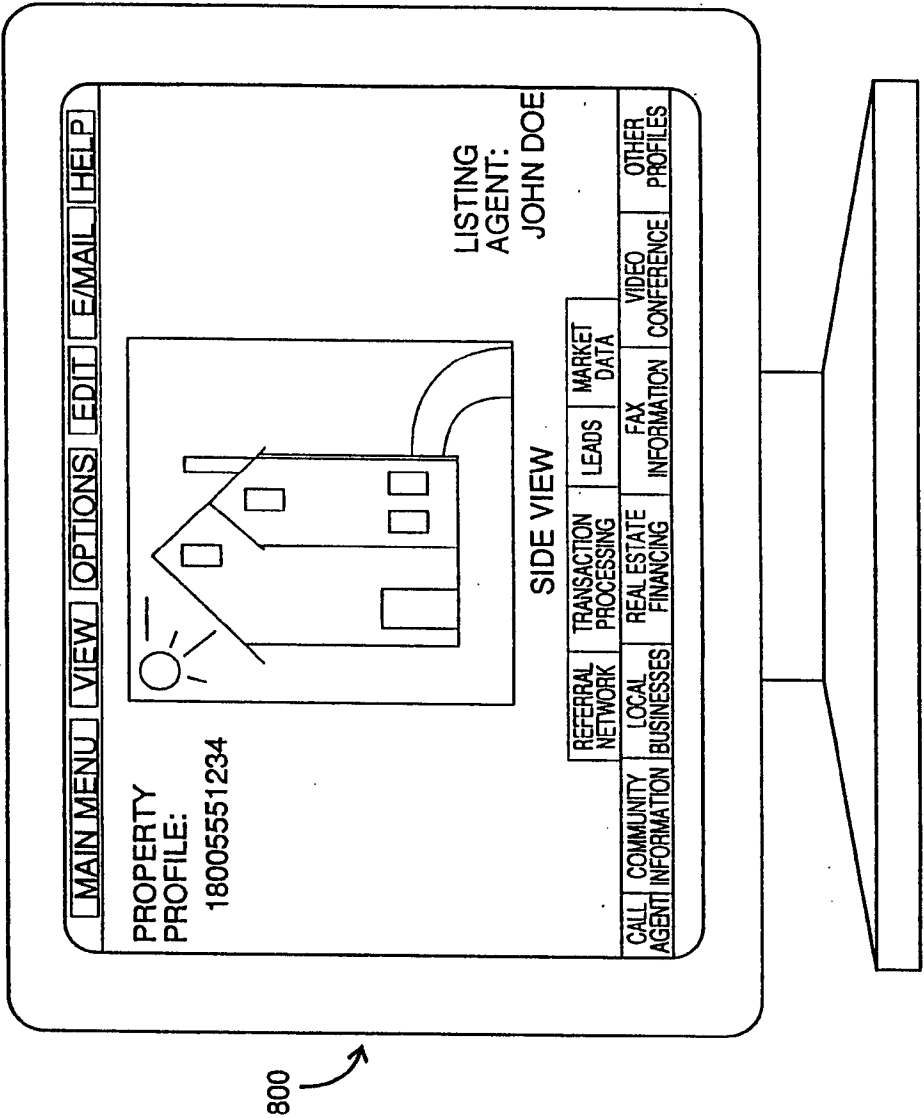
Fig. 8

NATIONAL	REGIONAL	STATE	LOCAL	CUSTOM	HELP

AD NUMBER	INQUIRY DATE	INQUIRY QUANTITY
18005551234	01-03-93	11,958
18005555678	01-04-93	10,450
18005559012	01-05-93	52,358
18005551314	01-08-93	90,560
18005551516	02-09-93	62,985
18005551718	04-15-93	11,040
18005551920	05-07-93	17,508
18005552122	06-19-93	11,771

PROPERT INQUIRIES	PROPERTY RETRIEVALS	ADVERTISER INQUIRIES	ADVERTISER RETRIEVALS
PROPERTY TYPES	LEASE	PURCHASE	MOVING	SPACE REQUIREMENTS
PRICE				

900

Fig. 9